



#7

OIPE

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/821,839

DATE: 02/13/2002 TIME: 12:50:34

Input Set : A:\PSU0020.ST25.txt

Output Set: N:\CRF3\02132002\I821839.raw

## **ENTERED**

3 <110> APPLICANT: Ma, Hong 5 <120> TITLE OF INVENTION: Plant Gene Required for Male Meiosis 7 <130> FILE REFERENCE: Psu-0020 9 <140> CURRENT APPLICATION NUMBER: 09/821,839 10 <141> CURRENT FILING DATE: 2001-03-29 12 <150> PRIOR APPLICATION NUMBER: 60/193,523 13 <151> PRIOR FILING DATE: 2000-03-31 15 <160> NUMBER OF SEQ ID NOS: 7 17 <170> SOFTWARE: PatentIn version 3.1 19 <210> SEQ ID NO: 1 20 <211> LENGTH: 2144 21 <212> TYPE: DNA 22 <213> ORGANISM: Arabidopsis thaliana 24 <400> SEQUENCE: 1 25 actgcatcag cccactetet agtetetgae taacgaaett ccattttcaa aattegaatt 60 27 totaatttot agtttcaago tttcgtacgg agaaaaaatg aaggagatcg cgatgaggaa 120 29 ttcaaagcgc aagcctgagc cgacgccgtt cgccgggaag aagctccggt cgacgcgatt 180 31 acgccggaag agagcacaga tetetecegt tettgttcaa teacetetet ggagcaaaca 240 33 aatoggagte tetgetgett etgtegatte etgeteegat ttgetagetg atgacaacgt 300 35 ttcctgtggt tcgagcagag tcgagaagag ctcgaatccg aagaagactc taattgaaga 360 37 ggtagaagtt totaaacctg gttataatgt gaaggagacg attggtgatt cgaaatttcg 420 39 aaggattacg aggtettact ctaagctaca caaggagaag gagggagatg agategaagt 480 41 aagcgaatcg tottgtgttg attcgaattc tggtgctgga ttaaggagat tgaatgtgaa 540 43 gggaaataaa attaacgaca acgatgagat ctctttctca cgatccgatg tgaccttcgc 600 45 cggacatgtc tccaacagcc ggagtttgaa tttcgaatcg gagaataagg agagcgacgt 660 47 cgtttctgtc atatctggag ttgagtactg ttccaagttc gggagcgtta ccggaggagc 720 49 tgataacgaa gaaattgaaa tetecaagee gageagette gtggaagetg attectetet 780 51 tggatcggcc aaggaattga agccggagct tgagatagtc ggatgcgtct ctgatctcgc 840 53 ttgctctgag aaattctcgg aagaggtttc ggattctctc gatgatgagt catctgagca 900 55 acgttcagag atatattcac agtattccga cttcgattac tcggattaca ctccgtccat 960 57 cttcttcgac tctggcagcg aattctctga gaaatcttcc tctgattctc ctatttcaca 1020 59 ttctcgctct ctgtacctcc agttcaagga acagttctgt agatccacga ttcccaacga 1080 61 ttttggatct tcttgcgagg aagaaattca ctctgaattg ctaaggtttg atgatgagga 1140 63 ggtggaagag agctatctaa ggctgaggga aagagaaaga agtcatgcat atatgcggga 1200 65 ctgtgctaag gcatactgct ccaggatgga caatactggt ctcatccctc gtctacgctc 1260 67 catcatggtt caatggattg taaagcaatg ttctgacatg gggcttcagc aagagacatt 1320 69 gtttctagga gttggtctgt tggatcgatt cctgagcaaa ggatcattca aaagcgaaag 1380 71 gactetaata etagteggga ttgcgagtet tactetggee accagaattg aagaaaatca 1440 73 accttacaac agcateegga aaaggaactt caccatteag aacctaagat atageeggea 1500 75 tgaagtggtg gcaatggagt ggctggttca agaagtcctc aacttcaaat gcttcacacc 1560 77 cacaatette aacttettgt ggttetaett aaaagetget egageeaate eagaagttga 1620 79 aaggaaagcc aaateettgg etgttacete actateegae caaacteaac tetgtttttg 1680 81 gccctcaact gtagcagctg cactcgtggt tetegcetge atcgaacaca acaaaatete 1740 ... RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/821,839

DATE: 02/13/2002 TIME: 12:50:34

Input Set : A:\PSU0020.ST25.txt

Output Set: N:\CRF3\02132002\1821839.raw

Output set. N. (CALS (CLEST)																		
	83 tg					+	aggt	ccat	at t	адаа	caac	a ga	taac	gagt	. tgc	ctga	atg	1800
	83 tg	cata	ccaa	cga	gtca	taa	ayyı +act	taaa	ca o	rtaaq	caat	c aa	aaag	aaca	aaa	accc	taa	1860
	85 cg 87 aa	ttaa	gagt	. ctg	gact	.gg L	cast		ac a	caca	aatt	a to	atta	ctat	: tta	caaa	aac	1920
	87 aa 89 aa	ccag	gaca	cag	tata	CEC	gai	accu tect	ct a	caga	ittta	ıt at	actt	aato	gag	ıctgg	act	1980
	89 aa 91 ta	acac	aagg	, taa	gtaa	itaa	yaat	2++2	at c	reca(	catt	t qt	gtcg	ctca	ı tac	cacat	tta	2040
	91 ta 93 tt	atta	gcto	: tta	gtat	acc	24+5	accu	ort o	atat	tctt	a aa	aaaga	atat	: tto	ccttg	ttt	2100
	93 tt	tctt	attt	tco	ctaa	ILLC	alle	19aci		2000	aaaaa	aa aa	aaa					2144
	93 tt 95 ga	aaaa	aaaa	aaa	iaaaa	laaa	aaaa	iaaau	iau t	1444								
	98 <2	10>	SEQ	ID N	10: 4	2												
	99 <2	11>	LENG	3TH:	5/8								•					
	100 <	212>	YY!	PE: 1	PRT		don	cie t	hal:	iana								
	100 (212) 113. ORGANISM: Arabidopsis thaliana. 101 <213> ORGANISM: Arabidopsis thaliana. 103 <400> SEQUENCE: 2 105 Met Lys Glu Ile Ala Met Arg Asn Ser Lys Arg Lys Pro Glu Pro Thr																	
	103 <	(400>	> SE(	QUEN	JE: 4	∠ 3.1 a l	4o+	hra l	Asn :	ser	Lvs	Arg	Lys 1	Pro	Glu	Pro T	hr	
	105 N	iet I	Lys (	Glu .	iie 4	e Ald I	Mec.	ary '	1011		10		-			15		
	106 I	L	_		a 1	5 1		Lau	Δτα	ser	Thr	Arg	Leu	Arg	Arg	Lys A	Arg	
	109 F	Pro 1	Phe A	Ala (	GTĀ .	гус і	гуъ	neu i	-1- Y	25		-			30			
	110 113 A				20	D 1	เราไ	T.O.I.	Va 1	Gln	Ser	Pro	Leu	Trp	Ser	Lys (	Gln	
	113 4	Ala (	Gln	Ile	ser	PLO	vaı	пец	40	02				45				
	114 117			35	<b>.</b>	71-	פוג	Sor	Val	Asp	Ser	Cys	Ser	Asp	Leu	Leu	Ala	
	117	Ile	Gly	Val	ser	Ala .	Ата	55	,		_	-	60					
	118 121		50		17.a. T	Cor	Cue	Glv	Ser	Ser	Arq	Val	Glu	Lys	Ser	Ser .	Asn	
	121	Asp	Asp	Asn	vaı	ser	70	GLY				75					80	
	122 125	65	_		mb	T 011	7 U	Glu	G1u	Va1	Glu	Val	Ser	Lys	Pro	Gly	Tyr	
	126			_	a1	mb~ βΣ	т1а	C1v	Asp	Ser	Lys	Phe	Arg	Arg	Ile	Thr	Arg	
	129	Asn	Val	Lys	GIU	THE	TTE	GIY	nop	105	-1				110			
	130		_	<b>a</b>	100	T OU	uie	Lvs	Glu	Lvs	Glu	Gly	Asp	Glu	Ile	Glu	Val	
	133	Ser	Tyr	ser	гаг	Leu	птэ	110	120	-1-		_		125				
	134			115	Con	Cvc	Val	Asp	Ser	Asn	Ser	Gly	Ala	Gly	Leu	Arg	Arg	
	137	Ser	Glu	ser	Ser	Cys	Val	135					140				_	
	138		130	**- 1	T 0	Clu	λen	LVS	Ile	Asn	Asp	Asn	Asp	Glu	Ile	Ser	Phe	
	141	Leu	Asn	vaı	ьуѕ	GTÄ	150	<u> </u>		-	-	155					160	
	142	145	_	<b>9</b>	n an	val	Thr	Phe	Ala	Glv	His	Val	Ser	Asn	Ser	Arg 175	Ser	
	145	Ser	Arg	ser	ASP	165	1111	I IIC	11,2,4	1	170					175		
	146			nh o	C1.,	Cor	Glu	Asn	Lvs	Glu	Ser	Asp	Val	Val	Ser	Val	Ile	
	149	Leu	Asn	Pne	180	261	GIU	11011	-1-	185		_			190		_	
	150			**- 1	100	Tree.	Cuc	Ser	Lvs	Phe	Gly	Ser	Val	Thr	Gly	Gly	Ala	
	153	Ser	GIŸ	val	GIU	тйт	Cys	001	200		-			205				
	154			195	C1.1	τlα	G111	Tle	Ser	Lvs	Pro	Ser	ser	Phe	val	Glu	Ala	
	157	Asp	Asn	GIU	Glu	116	GIU	215		_			220				_	
	158		210		T 011	C1 11	Cor	· Ala	Lvs	Glu	Leu	Lys	Pro	Glu	Leu	Glu	Ile	
	161	Asp	ser	ser	Leu	. Сту	230	1111	-1-			235	<b>,</b>				240	
	162	225	<b>a</b> 1		17-1	Çar	Agr	Leu	Ala	Cys	s Ser	Glu	ı Lys	Phe	Ser	Glu 255	Glu	
	165	Val	GIY	cys	vaı	245	110			-	250	)				255		
	166		G -	. 7		24J	Δer	) Asn	Glu	ı Sei	r Sei	c Glu	ı Glr	Arg	g Sei	Glu )	Ile	
	169	Val	. ser	ASP	sei	. шеи	. wal			265	5				270	)		
	170	_			260	, Cet	- ∆ ⊂ r	) Phe	. Ast	о Ту:	r Sei	r Ası	у Туз	Th	r Pro	ser ser	lle	
	173	Туг	ser	GII	: т т Л т	. 9er	. AS	110	280	)		_		28	5		_	
	174			275	, 60.	r (21 t	, Sei	r Gli	ı Phe	e Se	r Gl	u Ly	s Sei	se:	r Se	r Asp	Ser	
	177	ьие	; PUE	= AS[	נשני ק	LULY	. 50.											

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/821,839
DATE: 02/13/2002
TIME: 12:50:34

Input Set : A:\PSU0020.ST25.txt

Output Set: N:\CRF3\02132002\1821839.raw

				_		٠.												
178		290		•			295					300			_			
101	Dro	Tla	Ser	His	Ser	Arq	Ser	Leu	Tyr	Leu	Gln	Phe	Lys	Glu	Gln	Phe		
						2 1 11					212					-		
182	303	7 ~~	Ser	Thr	Tle	Pro	Asn	Asp	Phe	Gly	Ser	Ser	Cys	Glu	Glu	Glu		
					275					330								
186			Ser	a1	J2J	LOU	λra	Phe	Asp	Asp	Glu	Glu	Val	Glu	Glu	Ser		
	Ile	Hls	ser	GIU	ьеu	Leu	Ary	1110	345					350				
190				340	_	a1	3	C1	) To	Car	ніс	Δla	Tvr	Met	Arq	Asp		
193	Tyr	Leu	Arg	Leu	Arg	GLU	Arg	GIU	AIG	DCI	1115		365	•	_	-		
194			355			_		360	11.4	) an	7 cn	Thr		T.en	Tle	Pro		
197	Cys	Ala	Lys	Ala	$\mathtt{Tyr}$	Cys	ser	Arg	met	ASP	ASII	380	011	БСС				
		~ ~ ~					275					200						
201	Arg	Leu	Arg	Ser	Ile	Met	Val	Gln	Trp	TTE	var	гуг	GIII	Cys	JCI	400		
	~ ~ =					3 U ()					377							
205	Met	Gly	Leu	Gln	Gln	Glu	Thr	Leu	Phe	Leu	GLY	vaı	GTA	ьeu	Leu	тэр		
					405					4 1 1					1			
209	Arσ	Phe	Leu	Ser	Lys	Gly	Ser	Phe	Lys	Ser	Glu	Arg	Thr	Leu	11e	Leu		
				420					420					100				
213	Val	Glv	lle	Ala	Ser	Leu	Thr	Leu	Ala	Thr	Arg	Ile	Glu	Glu	Asn	GIU		
			425					7 7 1					447					
217	Dro	Tur	435 Asn	Ser	Ile	Arq	Lys	Arg	Asn	Phe	Thr	Ile	Gln	Asn	Leu	Arg		
							422					700						
210	Ti ve an	Cor	Δrσ	His	Glu	Val	Val	Ala	Met	Glu	Trp	Leu	Val	Gln	Glu	Val 480		
						470					4//							
222	465	7 0 0	Dha	T.17C	Cvs	Phe	Thr	Pro	Thr	Ile	Phe	Asn	Phe	Leu	Trp	Phe		
					105					470								
226	Т		T 170	λla	Δla	Ara	Ala	Asn	Pro	Glu	Val	Glu	Arg	Lys	: Ala	Lys		
				<b>EVV</b>					วบว									
230	~			. v.1	Thr	Cor	T.e.i	Ser	Asp	Gln	Thr	Gln	Leu	Суя	Phe	Trp		
			C 1 E					520					32-	,				
234	_		515	) • 37~ 3	. הוג	λla	λla	Leu	Va 1	Val	. Leu	ı Ala	Cys	: I1e	e Glu	His		
				val	ALG	, Alu	535	ДС	, ,		=	540	)					
238		530	,	0		. П	. Cln	Ara	va1	T16	Tivs	va]	His	val	Arg	Thr 560		
			3 TTE	s ser	, ATO	550	GIII	nig	, , ,		555	5				560		
242	545	)	_	93.	· · · <del>·</del> · · · ·	220		Cvc	. Val	Lvs	Sei	r Lei	ı Ası	Tr	. Lei	ı Leu		
		Ası	o Asr	1 GIU	rec		) GIU	. Cys	, , ,	570	)		•	_	575	5		
246					565	)				3,,	,							
249	Gl3	Gli	n															
			SEQ ]															
			LENG															
255	<2.	12> 1	TYPE	: DNA	7				. 1 4									
256	<23	13> (	ORGA	NISM	: Ara	abide	opsis	s the	ITTai	ıa								
258	3 <40	00>	SEQUI	ENCE	: 3					.+	tata:	a tt	caat	tatt	ttt	tgtacag		60
259	gto	cgac	caga	gtt	tgaco	caa 1	tgacı	caate	ji i	1109	caty:	u	2220	ccta	act	tgtacag tcacact		120
26	l taa	atgt	ctcg	taga	accga	aca a	acaa	gacca	ag a	aayt	aalc	2 A+	+4+>	gage	ato	tcacact tgagaca		180
								- 3 + 3 1	ra T	a	A ( 'A )	a C.L.	ւчւս	9490		~ <del> </del>		240
																		300
																		360
						~~~	20001	+++~	га т	aaac	LIGU	L UL	Luuu	LCGC				420
				~		+	ナベベヤ	יססס ד	FC 1	CT Ct.	ひたしし	<b>L</b> LL	a - a	uugu		J J		480
27	3 ta	taaa	tgtt	tat	ctct	tat	gtat	ttgg	ac c	caac	cacg	a CC	ayyı	yuyu		ggcgact	-	

RAW SEQUENCE LISTING

DATE: 02/13/2002 PATENT APPLICATION: US/09/821,839 TIME: 12:50:34

Input Set : A:\PSU0020.ST25.txt

Output Set: N:\CRF3\02132002\I821839.raw

the attention cotational ctctctctcc	540
275 ttgactcacc ggagatcatg aacacggetg atgatettge cetatecaaa etetetetee	600
275 ttgactcacc ggagatcatg aacacggetg atgatectgs south 1 277 accetgacte tteeteegaa getacetett cagaacttga teaattcatg gttetttttt 277 accetgacte tteeteegaa getacetett cagaacttga aactttteac gttetttat	660
	720
	780
	840
283 aacagtagca cttatacttg taaattgatt cacataatag garges 285 acgggagctc aaggaagcaa tggagaagcc tettaccgaa acgcatcgtt ttgtggatgc	900
285 acgggagete aaggaageaa tggagaagee tettacegaa absolutiona gggtaacatg 287 ggtgtacact cagetaaacg acategttat gteateacee cettaaaaaa gggtaacatg	960
287 ggtgtacact cagctaaacg acatcgttat gttateacec cottatactca agtctactca 289 aacaactgtt cggtgctact atgtcaatgc atttgtatgat cgtttattgg taaccgtaat	1020
	1080
	1140
	1200
	1260
297 aacactaget tecatgatta titteataa eeattutaa eeggyteesta eataaattta 299 taacgeattg eetttettae tatgtaaegg ttgttgcata tttttgtgta eataaattta	1320
299 taacgcattg cctttcttac tatgtaacgg ttyttgcdta ccddygg 301 tacacaaaga taaaaagtga ctaagcttaa aatatccttg aaaaagcctt tgggtcatta 301 tacacaaaga taaaaagtga ctaagcttaa aattggagtt ccgattctat tacagtaaga	1380
301 tacacaaaga taaaaagtga ctaagcttaa aatatcettg taadaysees syssään 301 tacacaaaga taaaaagtga ctaagcttaa aatatcettg taadaysees syssään 301 tacacaaaga tacacagg cgcattcagc aattggagtt ccgattctat tacagtaaga 303 acatggtgta agactacagg cgcattcagc aattggtggagt ttgttcgcat ttgttagcat cgcatggaac	1440
303 acatggtgta agactacagg cgcattcagc aattggagte cegaterial agact cgcatggaac 305 gggaacagaa ccgtaataat cgcgacacat ttgttcgcat ttgttagcat cgcatggaac	1500
305 gggaacagaa ccgtaataat cgcgacacat tcgttegeat cagtaty agattataa 307 cattggccag aaaacggggc aagtttgttc catcattctc gtctctctcg cacctttaaa 307 cattggccag aaaacggggc aagtttgatta acaggatttg gcttcttata aagataagat	1560
	1620
309 caaacatcag aaaatttgtg acattaatta acaggates jiraaaaga atggtcatga 311 taaaactact atttaaaaaga taatctgtac ctgaggctga aacgatgaag atggtcatga	1680
	1740
313 taagaacagc gaaatttatg aggtttetea tyyttetatg taataccggaa aagataggat 315 gacgtaaact tgaatcgttt tatatgcgaa attgacagag aaaaccggaa aagataggat	1800
315 gacgtaaact tgaatcgttt tatatgcgaa attgatagag tatatatgcgaa attgatag tatatatgcgaa attgatag tatatatgcgaa attgatag tatatatgcgaa attgatag tatatatgcgaa attgatag attgatag tatatatgcgaa attgatag	1860
317 ctcctttct ttctttcttt tagtgaaata gatgatata castattta aaataggctg 319 gtttattttg gaaattatga attttctggt caatgtgatc ttagaatttt aaataggctg	1920
	1980
321 gattttgtga cotgattoog tgtottatat otgataaagaa gtgattacga actttocaac 323 ataactgatg ttttaaaaag aagataattt tgataaagat ggtttatatg tttttgatgg	2040
323 ataactgatg tittaaaaag aagataatti tgatadagad 30320000000000000000000000000000000000	2100
325 attaaaagtt tagagtttat ttgatttat atctaatete ggtoomis 327 ggtttactaa ttatattata ccattcaagt tgaaatatat acaagttttt tttgttttat 327 ggtttactaa ttatattata ccattcaagt atataatttg gatcggattc aaccaaacca	2160
327 ggtttactaa ttatattata ccattcaagt tgaaatatat doorgattc aaccaaacca 329 ccctaaattc tctaatgtga tatatataat atataatttg ggcttcgtaa agaactaaag	2220
	2280
331 tgaacgagat ttacattttg ccgtttteeg addtgeteds ggtaaaagtt tacttttttg 333 gtgatattta gatattgggt atactatttg ttgtattggg cttaaaagtt tacttttttg	2340
	2400
	2460
	2520
339 gcgacataac aaatgttaca caagtaytyt acctudada objets 341 aacagtgatc aatttcagtg tataaaaaaaa gtcttcttaa atcatcttt aattccaaca 341 aacagtgatc aatttcagtg tataaaaaaaa gtcttcttaa aaaaa aaattcacac gtgtgctcaa	2580
341 aacagtgatc aatttcagtg tataaadada ytetteetaa abaattcacac gtgtgctcaa 343 atatgacatt cacaaactta tctatgattt ttttaaaaaaa aaattcacac gtgtgctcaa	2640
	2700
	2760
	2820
	2880
351 caaacgctga tetetacatt agecaaddad gaatageges sales agecatetee 353 egtgeaccaa acegtagggt ataatatete tetetagtet etgactaacg aacttecatt	2940
353 cgtgcaccaa accgtagggt ataatatete tetetaete todateaeg aacttecatt 355 caagaaactt ctataactgc atcagcccac tetetagtet etgactaacg aacttecatt 355 caagaaactt ctataactgc atcagccac tetetagtet etgactaacg aacttecatt	3000
357 ttcaaaattc gaatttctaa tttctagttt caagettoog 5000000	3018
359 gatcgcgatg aggaattc	
362 <210> SEQ ID NO: 4	
363 <211> LENGTH: 3970	
364 <212> TYPE: DNA	
365 <213> ORGANISM: Arabidopsis thallana	
	60
367 <400> SEQUENCE: 4 368 ttgaccatgc cattgcgaca taacaaatgt tacacaagta gtgtacctat aaagtagtgt	•
-	

RAW SEQUENCE-LISTING

PATENT APPLICATION: US/09/821,839

DATE: 02/13/2002 TIME: 12:50:35

Input Set : A:\PSU0020.ST25.txt

Output Set: N:\CRF3\02132002\1821839.raw

						•	
	acctataata	tattaacadt	gatcaatttc	agtgtataaa	aaaagtcttc	ttaaatcatc	120
			ASTTCACAAA	CHARCIALA	U C C C C C C C C C C C C C C C C C C C		180
							240
							300
							360
							420
							480
							540
			~++~~~ <u>~</u>	CTABLLICIA	ullicuuuquu	4409 ) )	600
			~~+ <i>~</i> ~~ <i>~</i> ~~	Tranaucuca	aucceque	3~~3~-3-	660
							720
							780
39	2 cttgttcaat 4 tgctccgatt	cacctctctg	gagcaaacaa	toctataatt	cgagcagagt	cqaqaagagc	840
39	4 tgctccgatt	tgctagctga	tgacaacgtt	atagaagttt	ctaaacctgg	ttataatgtg	900
39	4 tgctccgatt 6 tcgaatccga	agaagactct	aattgaagag	aggate	ggtcttactc	taagctacac	960
39	6 togaatooga 8 aaggagaoga	ttggtgattc	gaaatttcga	aggactacga	cttatattaa	ttcgaattct	1020
40	8 aaggagacga 0 aaggagaagg	agggagatga	gatcgaagta	agegaacege	ttaacgacaa	cgatgagatc	1080
							1140
							1200
							1260
							1320
							1380
							1440
							1500
							1560
							1620
							1680
			~atttcatat	CI CI LUUAA L	, aaccyccwy		1740
			+~~+*~~	TECALL CUAL	. Lactagece		1800
		4 _ 4 _ 0 + 0	* +++~>+**	aaarriuut	. LLuuuuuuu		1860
							1920
			. + ^ + + 4 ^ 2 T 2 T	aracaaaaa	. 464664444	, w	1980
							2040
							2100
			・ったへつがてるびじる	i daadaa LLa Ly	4 Guycuuw - 3 ·		2160
							2220
	and the second s		. <u>~+~~~~</u>	t arai i cillu		,	2280
							2340
							2400
			, totaaccaca	י אמאאוו	y addatedate.	, ,,,,,,	2460
							2520
							2580
							2640
							2700
							2760
							2820
							2880
							2940
							3000
4	66 tocagaagt	t gaaaggaaa	g ccaaatcct	t ggctgttac	c tcactatcc	g accaaactca	2000
7		, , , , ,					

VERIFICATION SUMMARY

DATE: 02/13/2002 TIME: 12:50:36

PATENT APPLICATION: US/09/821,839

Input Set : A:\PSU0020.ST25.txt
Output Set: N:\CRF3\02132002\I821839.raw